Preliminary Alternative 25
Corresponding to Alternative Formulation Strategy 1A, 2B, 3B, 4B- Max)

Primary Conflict	**Approach to Resolve Conflict**
Fisheries and Diversions (Conflict 1)	**Increase Fish Productivity (1A)** Diversion Modification (1B)
Habitat and Land Use/Flood Protection (Conflict 2)	Preserve Existing Land Use (2A) **Create Additional Habitat Area (2B)**
Water Supply Availability and Beneficial Uses (Conflict 3)	Reduce Critical Export Area Demands (3A) **Enhance Delta Supplies as Inflows (3B)**
Water Quality and Land Use (Conflict 4)	**Managing Quality of Delta Inflow (4A)** Manage Instream/In-Delta Water Quality (4B)
Minimum or **Maximum**	

Solution Overview

Preliminary Alternative 25 generates substantial new benefits. This particular strategy relies upon boosting fish productivity, creation of habitat, increases in water availability north of the Delta, and reduction in the impact of toxics -- all at a maximal level. Thus, the solution generates: significant amounts of new habitat, both aquatic and terrestrial; environmental flows and user water supplies (via storage and demand management in and above the Delta); removal of some barriers and the installation of other barriers to promote fish migration; hatcheries for salmon; an environmentally friendly through Delta water transfer scheme; reductions in toxic discharges into the water system; and levee and flood control improvements.

Actions Selected

Habitat - Habitats are improved across the board. All types of aquatic, wetland, and terrestrial habitat are enhanced, both in and out of the Delta. Improvements include restoration of habitat, and removal and installation of barriers as needed to channel migrating anadromous fish away from bad habitat and into good habitat. Improvements are also made in upstream temperature patterns for salmon.
Populations - Measures are taken to boost commercial and recreational fish populations through hatcheries. Also, measures are taken to discriminate against undesirable species via exotic species control and predator control.
Diversions - This strategy does not allow for measures aimed at reducing the impacts of diversions on fish. However, the impact of existing diversion points is reduced via habitat improvements. In particular, this alternative includes significant restoration of shallow water habitat in the Central Delta. this restoration should reduce net velocities toward the pumps and should reduce the impacts of pumping from the South Delta. Also, the capacity of the export facilities is increased to allow greater diversions of water during periods of low impact. In this way, export supplies can be increased without cutting into environmental supplies.
Water use - All types of environmental flows are improved, including transport, attraction, and baseline flows. Exports also increase, as described under "Diversions". Improved flows are generated partly through demand management in and above the Delta, but primarily through major new storage elements in and above the Delta -- a combination of on-stream, off stream, and groundwater storage. In this way, wet period flows are captured for use during periods of high competition.

Water quality - Major efforts are made to keep toxics of all kinds from getting into the system, including pollutants associated with agriculture, dredging, and mining.
Land use/ levees/ flood control - Significant amounts of existing land uses are converted into both habitat and water storage. Major efforts are made to protect levees better. The creation of floodways in the upstream areas as habitat should improve flood control protection.
Institutions - A number of institutional changes may be necessary for this alternative, including: changes in law to promote groundwater storage and conjunctive use; better regulation of commercial and recreational fishing; water pricing measures, funding mechanisms, and the development of institutions to assure that the system is operated as promised in the future.

Preliminary Assessment

The proposed alternative is a significant improvement from the no action case. It should greatly expand fish habitat and populations while allowing for increased diversions. Its weaknesses have to do with the absence of actions which are ruled out by this strategy. In particular, south of Delta storage and other methods of reducing the draw on the Delta by the export areas are ruled out. Similarly, efforts aimed at reducing the impacts of diversions (screening, shifting intake points) are also ruled out. This means that export areas continue to heavily constrained in the Delta, with problems moving water during periods of high environmental sensitivity (because of the location of the intakes) and limitations on the ability to move and store water during periods of low environmental sensitivity.

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